

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



341  
503

FEDERAL - STATE - PRIVATE  
COOPERATIVE SNOW SURVEYS



U. S. DEPT. OF AGRICULTURE  
NATIONAL AGRICULTURAL LIBRARY

JUN 7 1966

CURRENT SERIAL RECORDS

**WATER SUPPLY OUTLOOK**  
and  
**FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**  
for  
**WYOMING**

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE,  
and  
STATE ENGINEER of WYOMING

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, and other Federal, State and private organizations.

AS OF  
MAY 1, 1966

# UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

## To Recipients of Water Supply Outlook Reports:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

### PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
<b>RIVER BASINS</b>			
WESTERN UNITED STATES	MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1	PORTLAND, OREGON	ALL COOPERATORS
<b>STATES</b>			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

### PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.



FEDERAL-STATE-COOPERATIVE  
SNOW SURVEYS AND WATER FORECASTS  
FOR  
WYOMING

Issued  
May 1, 1966

Report Prepared  
by  
George W. Peak  
Snow Survey Supervisor  
and  
Tommy A. George  
Assistant Snow Survey Supervisor  
State of Wyoming

Soil Conservation Service  
345 $\frac{1}{2}$  East 2nd Street  
P. O. Box 340  
Casper, Wyoming 82601

Issued by

B. H. Hopkins  
State Conservationist  
Soil Conservation Service  
Casper, Wyoming

Floyd Bishop  
State Engineer of Wyoming  
Capitol Building  
Cheyenne, Wyoming







## INDEX TO WYOMING SNOW COURSES

MISSOURI RIVER DRAINAGE										MISSOURI RIVER DRAINAGE										COLORADO RIVER DRAINAGE									
Green River above Green River										Green River below Green River										Snake River Basin (Above Jackson Lake)									
Madison River										Porcupine Creek										Green River above Green River									
Clark's Fork										Powder River										Green River below Green River									
Wind River										Sweetwater										Columbia River Drainage									
Popo Agie River										Laramie River										Snake River Basin (Above Jackson Lake)									
Owl Creek										Crow Creek										Jackson Lake to Polisades									
Greybull River										North Platte										Jackson Lake to Polisades									
Shoshone River										Cheyenne River										Jackson Lake to Polisades									
Nowood Creek										Cheyenne River										Jackson Lake to Polisades									
Shell Creek										Cheyenne River										Jackson Lake to Polisades									
Bear Trap										Cheyenne River										Jackson Lake to Polisades									
Gold Springs Camp										Cheyenne River										Jackson Lake to Polisades									
Medicine Lodge Lakes										Cheyenne River										Jackson Lake to Polisades									
Middle Powder										Cheyenne River										Jackson Lake to Polisades									
Munkres Pass										Cheyenne River										Jackson Lake to Polisades									
Onion Gulch										Cheyenne River										Jackson Lake to Polisades									
Powder River Pass										Cheyenne River										Jackson Lake to Polisades									
Tyrell R.S.										Cheyenne River										Jackson Lake to Polisades									
West Tensleep Lake										Cheyenne River										Jackson Lake to Polisades									
Bald Mountain										Cheyenne River										Jackson Lake to Polisades									
Beaver-Tongue Divide										Cheyenne River										Jackson Lake to Polisades									
Bone Spring Divide										Cheyenne River										Jackson Lake to Polisades									
Granite Pass										Cheyenne River										Jackson Lake to Polisades									
Ranger Creek										Cheyenne River										Jackson Lake to Polisades									
Shell Creek										Cheyenne River										Jackson Lake to Polisades									

a. Numerals 1,2,3,4 and 5 refer to January 1, February 1, March 1, April 1, and May 1.

b. Numerals refer to Agency that secures the snow survey, as follows:

1. Soil Conservation Service.	c. Colorado snow courses.
2. U. S. National Park Service.	m. Montana snow courses.
3. U. S. Indian Service.	sd. South Dakota snow courses.
4. U. S. Forest Service.	u. Utah snow courses.
5. U. S. Bureau of Reclamation.	A. Aerial Snow Depth Cage
6. Wyoming State Engineer.	M. Soil Moisture Stack
	P. Pearson Storage Cage



## WYOMING WATER SUPPLY OUTLOOK

May 1, 1966

\* \* \* \* \*

\* The Soil Conservation Service has completed the May 1 snow course network \*  
\* in Wyoming. \*

\* The State snow pack is seriously below normal. In some areas carryover \*  
\* storage will partially make up the deficit. However, there is a strong \*  
\* probability that middle and late season water will be inadequate for those \*  
\* dependent on diversion above reservoir storage. \*

\* \* \* \* \*

The following report is based on the assumption that summer precipitation over the mountains and plains of Wyoming will be close to normal. Extremely heavy summer precipitation will be necessary to bring stream flow up to average.

THE NORTH PLATTE watershed will release 40 percent of average at Northgate, 67 percent from the Encampment drainage, and 65 percent from the Snowies for a combined yield of 52 percent at Saratoga stream gaging station. Reservoir storage on the North Platte system is exactly average for May 1. The combined total of expected runoff and storage is 83 percent of the fifteen year average. There will probably be very little carryover storage for 1967.

The Laramie River will release 50 percent of normal at Jelm. Wheatland active storage is standing at 93,400 acre feet--completely full, and 262 percent of the fifteen year average for May 1. However, there will be very little supplemental flow from the Laramie River.

THE WIND RIVER forecast is for 56 percent at Dubois, 62 percent into Bull Lake Reservoir, and 55 percent from the Little Popo Agie. Bull Lake Reservoir contents are 84,300 acre feet which is 164 percent of normal for May 1. The combined total for Bull Lake Reservoir will be 88 percent of average.

Flow from the Big Horns ranges from 50 to 70 percent of normal. Snowmelt runoff from the Shoshone watershed is forecast at 64 percent into Buffalo Bill Reservoir. Storage in Buffalo Bill is 176 percent of normal. Combined storage and inflow will be 83 percent of normal.

Runoff from the east slopes of the Big Horns is expected to be very poor. Stream-flow will range from 60 percent of average at the north end to 50 percent from the southern watersheds.

THE GREEN RIVER snow surveys indicate 78 percent of normal flow at Warren Bridge and 60 percent at LaBarge. North Piney Creek and tributaries from the west will come in at 60 percent and New Fork River will contribute 68 percent. The combined flow at Green River, Wyoming, is expected to be 64 percent of the average summer runoff.



THE SNAKE RIVER BASIN above Moran has a seasonal outlook of 77 percent into Jackson Lake. Farther downstream, Pacific Creek, Buffalo Fork, the Gros Ventre and the Hoback will contribute about 78 percent for a combined inflow of 77 percent into Palisades Reservoir. The Greys River will discharge 71 percent into Palisades and the Salt will yield 81 percent to the reservoir.

YELLOWSTONE LAKE inflow is forecast at 80 percent of average and an outflow at Fishing Bridge of 680,000 acre feet. The maximum lake level will be 4.75 feet on the gage at Lake Camp and the average lake level during June, July and August will be 3.65 feet.

This is the final water supply report for the season. Again we suggest that you consider the crop and water management suggestions that were given to you in the April report.





## WYOMING STREAM-FLOW FORECASTS, MAY 1966

BASIN AND TRIBUTARY	April 1 - September 30 (REVISED)			
	Seasonal Stream-Flow in Thousands of Acre Feet			
	Forecast	% 15-Year	Measured Runoff	
	Runoff	Average	1964	15-Yr. Avg. 1948-62
CLARK'S FORK				
Chance (at)	500	86%	602	586
MADISON RIVER				
West Yellowstone (at)	198	91%	216	218
YELLOWSTONE RIVER (April-October)				
Yellowstone Lake Outlet (at)	680	80%	998	850
LITTLE POPO AGIE				
Lander (near)	23	55%	45	42
BULL LAKE CREEK				
Lenore (near)	110	62%	175	177
WIND RIVER				
Dubois (near)	56	56%	113	100
TENSLEEP CREEK				
Tensleep (near)	36	50%	79	72
MEDICINE LODGE CREEK				
Hyattville (near)	8	44.5	31	18.2
SHELL CREEK				
Shell (near)	44	70%	91	63
SHOSHONE RIVER				
Buffalo Bill Dam (below) (1)	520	64%	845	805
LARAMIE RIVER				
Jelm (near) (2)	56	50%	100	112
ENCAMPMENT RIVER				
Encampment (near)	95	67%	130	141
NORTH PLATTE RIVER				
Northgate (near)	105	40%	154	260
Saratoga (at)	335	52%	483	641
MEDICINE BOW RIVER				
Hanna (Near)	57	68%	134	84
DEER CREEK (Mar.-July)				
Glenrock (at)	21	90%	60.2	23.2





WYOMING STREAM-FLOW FORECASTS, MAY 1966

BASIN AND TRIBUTARY	April 1 - September 30 (REVISED)			
	Seasonal Stream-Flow in Thousands of Acre Feet			
	Forecast Runoff	% 15-Year Average	Measured Runoff	
			1964	15-Yr. Avg. 1948-62
GREEN RIVER				
Warren Bridge (at)	255	78%	349	326
LaBarge (near)	550	60%	1009	920
Green River (at)	620	64%	989	970*
NORTH PINEY CREEK				
Mason (at)	22	58%	27	38
NEW FORK RIVER				
Boulder (near)	155	68%	249	228
BIG SANDY CREEK				
Big Sandy (near)	31	60%	53	52
LITTLE SANDY CREEK				
Elkhorn (near)	7.8	60%	13	13
LITTLE SNAKE				
Dixon (near)	160	54%	325	295
SNAKE RIVER				
Moran (at) (3)	670	77%	861	865
Palisades (above)	2000	77%	2694	2600
PACIFIC CREEK				
Moran (near)	124	73%	173	170
GREYS RIVER				
Palisades (above)	272	71%	392	383*
SWIFT CREEK				
Affton (near)	44	92%	52	48
SALT RIVER				
Etna ab. Palisades	268	81%	444	331*
SMITHS FORK				
Border (near)	96	86%	123	112
THOMAS FORK				
State Line (near)	22	79%	38	30

All stream data taken from observed flow record with the following exceptions:

- (1) Observed flow corrected for Buffalo Bill storage and Heart Mountain diversion.
- (2) Observed flow corrected for Transbasin Diversions.
- (3) Observed flow corrected for Jackson Lake storage.

\* Includes some estimated flows.



WYOMING SNOW SURVEYS - ABOUT MAY 1, 1966

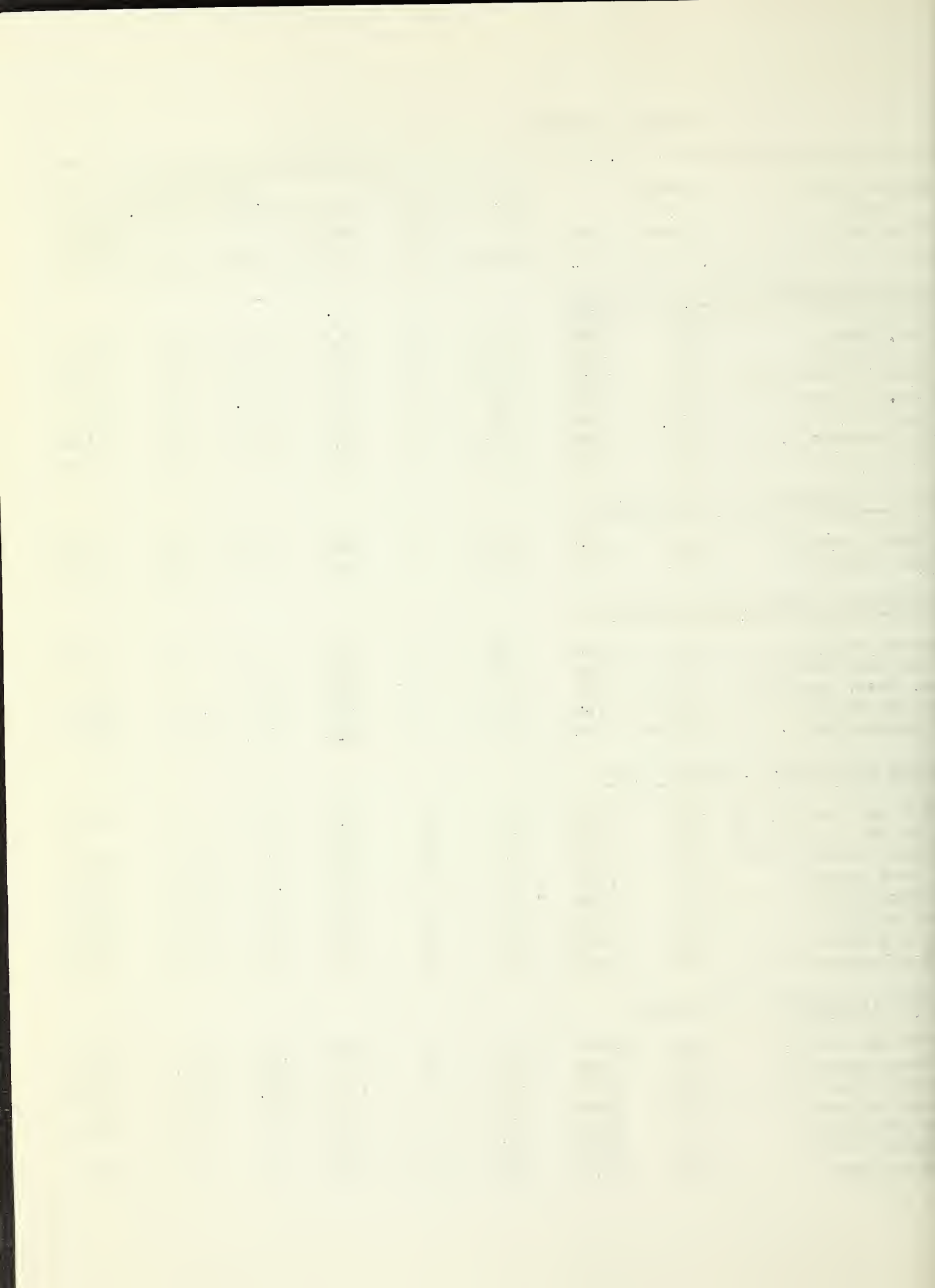
Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			Date of Survey	1966 Snow Depth (In.)	Water Content (In.)	PAST RECORD		
						Water Content (In.)		
						1965	1964	Average 1948-62
<u>MADISON RIVER - YELLOWSTONE PARK</u>								
Norris Basin ‡	10E2	7500	5/4	11	3.5	10.1	13.0	5.5*
21 Mile <sup>m</sup>	11E6	7150	4/30	33	12.8	24.9	18.6	14.9
West Yellowstone <sup>m</sup>	11E7	6700	4/30	4	1.4	11.7	8.3	5.6
<u>UPPER YELLOWSTONE - YELLOWSTONE PARK</u>								
Canyon	10E3	7750	4/29	36	12.8	24.7	16.0	13.5*
East Entrance #2 ‡	9E5MP	7000	5/2	0	0.0	3.2		
Lake Camp #1	10E4	7850	4/29	25	6.8	14.0	8.5	8.1
Lake Camp #2	10E4	7850	4/29	22	6.0	13.4	7.0	6.6*
Lupine Creek	10E1	7300	5/3	0	0.0	8.2	8.2	7.7*
Norris Basin ‡	10E2	7500	5/4	11	3.5	10.1	13.0	5.5*
Northeast Entrance	10D7MP	7400	5/2	8	3.2	10.3	8.2	6.2
Sylvan Pass ‡	10E5	7100	4/29	25	9.0	15.2	11.1	10.6*
<u>LOWER YELLOWSTONE - CLARK'S FORK</u>								
Lodgepole	9E1	8200	4/28	25	7.6	12.1	11.3	10.7a
<u>LOWER YELLOWSTONE - WIND RIVER</u>								
Big Warm	9F12	8800	4/25	13	4.4	10.8	8.8	7.3*
Burroughs Creek	9F4	8800	4/27	26	8.4	23.6	11.0	14.4*
Dinwoodie	9F10	10000	4/28	30	7.5	17.4	11.2	14.2*
Dry Creek	9F9	9500	4/28	12	2.9	8.7	6.6	7.5*
DuNoir	9F6	8750	4/25	13	4.2	11.8	9.0	7.0
Geyser Creek	9F7	8500	4/26	11	3.1	9.2	6.0	5.7*
Little Warm	9F8	9500	4/26	49	12.4	25.9	16.1	19.9*
Sheridan R.S. #2	9F14	7500	4/25	3	1.2	5.8	4.3	3.4*
T-Cross Ranch	9F3	8000	4/27	4	1.5	9.8	2.8	3.9
Togwotee Pass ‡	10F9MP	9600	4/30	60	23.9	44.0	33.1	33.7
<u>LOWER YELLOWSTONE - OWL CREEK</u>								
Owl Creek	8F1	8700	4/25	12	3.1	9.3	9.6	7.7*





WYOMING SNOW SURVEYS - ABOUT MAY 1, 1966

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			Date of Survey	1966	Water Content (In.)	PAST RECORD Water Content (In.)		
				Snow Depth (In.)		1965	1964	Average 1943-62
LOWER YELLOWSTONE - POPO AGIE RIVER								
Bruces Camp	8G5	6500	5/3	0	0.0			
Blue Ridge	8G2	9500	5/2	19	7.0	18.7	14.5	12.1
Hobb's Park	9G3	10000	4/30	39	11.8	25.4	23.7	20.6*
Mosquito Park R.S.	9G4	9500	4/30	9	2.8	11.9	11.9	8.3*
Sawmill Glade	8G1	8500	5/3	3	1.3	8.5	11.5	6.1
South Pass ‡	8G3MP	9000	5/2	25	9.7	21.4	15.1	14.5
St. Lawrence R.S.	9F11	9000	4/29	11	3.5	11.4	8.8	6.8a
Trout Creek	9G2	8400	4/30	0	0.0	T	7.6	2.6*
LOWER YELLOWSTONE - GREYBULL RIVER								
Timber Creek #2	9E3	8800	4/26	1	0.4	6.9	6.5	3.6*
Wood River #2	9F15	8000	4/26	8	2.0	10.9	7.5	5.3*
LOWER YELLOWSTONE - SHOSHONE RIVER								
Carter Mountain	9E4M	7800	4/27	9	2.6	7.4	9.4	6.7*
East Entrance #2 ‡	9E5MP	7000	4/29	0	0.0	3.2		
Northeast Entrance	10D7MP	7400	5/2	8	3.2	10.3	8.2	6.2
Sylvan Pass ‡	10E5	7100	4/29	25	9.0	15.2	11.1	10.6*
Togwotee Pass ‡	10F9MP	9600	4/30	60	23.9	44.0	33.4	33.7
LOWER YELLOWSTONE - NOWOOD CREEK								
Cold Springs Camp #1	7E25	8700	5/1	19	5.5	12.1	9.1	6.8*
Cold Springs Camp #2	7E25	8700	5/1	23	7.3			
Medicine Lodge Lakes	7E24M	9500	5/1	32	8.2	21.1	15.8	12.2*
Middle Powder ‡	7F2	7400	5/2	35	12.0	17.3	23.4	11.9*
Munkres Pass ‡	7E8	9700	5/2	29	8.7	12.6	15.2	9.6*
Opion Gulch ‡	7E27M	8100	5/2	24	7.5	12.1	12.7	9.3*
Tyrell R.S.	7E35	8300	5/3	22	7.3	11.4	10.9	7.4*
West Tensleep Lake	7E26A	9075	5/3	32	8.8	17.3	13.8	11.6*
LOWER YELLOWSTONE - SHELL CREEK								
Bald Mountain ‡	7E21M	9600	4/24	68	23.6	34.7	32.4	24.2*
Beaver Tongue ‡	7E20	9200	4/24	57	17.3	32.5	25.1	21.4*
Bone Spring Divide ‡	7E18A	9200	4/28	62	17.5	27.8	21.8	20.1*
Granite Pass ‡	7E17P	8950	4/28	54	14.8	26.4	21.0	19.6*
Ranger Creek	7E4	8800	4/26	19	5.9	15.2	11.5	7.5*
Ranger Creek #2	7E4	8800	4/26	19	5.3			
Shell Creek	7E23A	9600	4/26	43	13.8	24.2	19.2	16.3*





WYOMING SNOW SURVEYS - ABOUT MAY 1, 1966

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			Date of Survey	1966	PAST RECORD			
				Snow Depth (In.)	Water Content (In.)	Water Content (In.)		
						1965	1964	Average 1948-62
<u>LOWER YELLOWSTONE - TONGUE RIVER</u>								
Beaver Tongue	7E20	9200	4/24	57	17.3	32.5	25.1	21.4*
Big Goose #2	7E32M	7700	4/30	26	8.0	8.8	12.2	9.8*
Bone Spring Divide *	7E18A	9200	4/28	62	17.5	27.8	21.8	20.1*
Burgess R.S. #2	7E33P	7900	4/25	23	6.2	11.3	15.4	9.0*
Dome Lake #2	7E34A	8800	4/30	33	9.8	14.0	14.7	12.2*
Gloom Creek	7E14A	9300	4/27	52	14.0	20.8	20.3	16.7*
Granite Pass *	7E17P	8950	4/28	54	14.8	26.4	21.0	19.6*
North Tongue	7E15	8800	4/25	31	8.4	17.6	17.2	9.0*
Sibley Lake	7E11	8000	4/29	32	9.7	14.3	19.2	10.4*
Steamboat Point	7E10	7500	4/29	31	9.6	11.8	15.8	9.5*
Sucker Creek	7E12A	9000	4/27	47	13.0	20.9	22.1	14.5*
Wood Rock G.S.	7E13	8500	4/29	36	9.8	16.4	16.9	12.6*
<u>LOWER YELLOWSTONE - PORCUPINE CREEK</u>								
Five Springs Falls	7E31	7500	5/2	5	2.0	9.0	11.0	6.0*
Medicine Wheel	7E30	9000	4/25	41	12.4	25.6	21.5	17.0*
<u>LOWER YELLOWSTONE - POWDER RIVER</u>								
Middle Powder	7F2	7400	5/2	35	12.0	17.3	23.4	11.9*
Muddy Creek G.S.	6E2	7500	5/2	17	5.7	0.8	2.5	3.9*
Munkres Pass *	7E8	9700	5/2	29	8.7	12.6	15.2	9.6*
Onion Gulch *	7E27M	8100	5/2	24	7.5	12.1	12.7	9.3*
Soldier Park	7E5	8700	5/3	21	7.2	4.5	5.1	5.9*
Sour Dough	6E1	8500	5/3	22	6.9	5.0	6.4	6.4*
<u>NORTH PLATTE - SWEETWATER</u>								
Grannier Meadows	8G4	9000	5/2	30	11.0	17.7	15.3	13.6
Larsen Creek	9G6A	9000	4/27	25	7.2	19.3	9.7	8.5*
South Pass *	8G3MP	9000	5/2	25	9.7	21.4	15.1	14.5
<u>NORTH LARAMIE MOUNTAINS</u>								
Boxelder #2 *	5G1	7500	5/2	12	5.1	0.4	10.5	4.0*
Casper Mountain *	6G1MP	7940	5/2	39	14.0	13.8	27.6	12.9*
LaBonte *	5G2	8450	4/28	T	T	T	7.8	0.0*



WYOMING SNOW SURVEYS - ABOUT MAY 1, 1966

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			1966			PAST RECORD		
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.) Average		
						1965	1964	1948-62
<u>NORTH PLATTE - CROW CREEK</u>								
Pole Mountain #2	5H1	8700	4/30	0	0.0	T	6.3	1.9*
<u>NORTH PLATTE - LARAMIE RIVER</u>								
Albany †	6H11A	9400	5/2	7	2.9	17.3	12.5	11.0*
Brooklyn Lake #2	6H1MP	10200	5/1	4.0	13.2	28.1	22.7	24.4a
Cameron Pass <sup>c</sup>	5J1	10285	4/28	55	21.9	34.3	32.2	28.1
Chambers Lake <sup>c</sup>	5J2	9000				9.6	7.0	5.5
Deadman Hill <sup>c</sup>	5J6	10300	4/27	37	13.0	19.0	17.1	18.1
Evans †	6H15	9000	4/29	16	6.5	13.7	11.2	9.5*
Foxpark †	6H12P	9200	5/3	3	0.9	8.2	8.7	4.9
Hairpin Turn #3	6H2	9500	5/1	15	5.8	19.4	15.2	14.7a
LaBonte †	5G2	8450	4/28	T	T	T	7.8	0.0*
Libby Lodge	6H3	8700	5/1	4	1.5	10.2	10.7	8.4
Libby Lodge #2	6H3	8700	5/1	0	0.0			
Lost Lake <sup>c</sup>	5J23	9300	5/1	6	1.9	13.2	7.5	10.2
McIntyre <sup>c</sup>	5J15	9100	4/23	18	5.8	13.1	13.2	10.2
Pole Mountain #2 †	5H1	8700	4/30	0	0.0	T	6.3	1.9*a
Roach <sup>c</sup> †	6J12	9800	4/23	4.7	16.4	24.0	17.8	21.0
Rock Creek †	6H14	9800	4/29	55	21.2	29.9	33.7	
Rock Creek #2 †	6H14	9800	4/29	51	17.3			
<u>NORTH PLATTE - ABOVE SEMINOLE RESERVOIR</u>								
Albany †	6H11A	9400	5/2	7	2.9	17.3	12.5	11.0*
Black Hall Mtn	6H18		4/27	18	4.7			
Bottle Creek	6H8	8200	4/28	16	6.0	15.8	14.4	11.1
Bottle Creek #2	6H8	8200	4/28	2	0.6			
Boxelder #2 †	5G1	7500	5/2	12	5.1	0.4	10.5	4.0*
Cameron Pass <sup>c</sup> †	5J1	10285	4/28	55	21.9	34.3	32.2	28.1
Casper Mountain †	6G1MP	7940	5/2	39	14.0	13.8	27.6	12.9*
Columbine <sup>c</sup>	6J3	9300	4/26	25	9.6	28.6	23.5	22.9
Deep Lake	6H17	10500	4/29	93	37.3	44.3		
Evans †	6H15	9000	4/29	16	6.5	13.7	11.2	9.5*
Foxpark †	6H12P	9200	5/3	3	0.9	8.2	8.7	4.9
LaBonte †	5G2	8450	4/28	T	T	T	7.8	0.0*
Moss Lake	6H16	9800	4/29	4.8	18.3	24.2		
North Barrett Creek	6H5AM	9400	4/26	4.7	17.3	23.9	25.6	20.4a
North French Creek	6H4AP	10200	4/26	65	26.8	36.1	39.4	32.7
Northgate <sup>c</sup>	6J7	8500	4/29	1	0.4	4.7	5.4	
North Barrett #2	6H5AM	9400	4/26	4.0	13.8			





## WYOMING SNOW SURVEYS - ABOUT MAY 1, 1966

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			1966			PAST RECORD		
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)		Average
						1965	1964	1948-62

## NORTH PLATTE - ABOVE SEMINOLE RESERVOIR, CON'T

Old Battle #1	6H10P	9800	4/28	62	25.0	44.1	32.4	27.4*
Old Battle #2	6H10P	9800	4/28	67	28.0			
Park View C	6J2	9200	4/28	10	3.0	8.7	5.5	6.7
Rabbit Ears C	6J9	9550	4/27	37	16.1	29.6	27.6	27.9
Roach C	6J12	9800	4/23	47	16.4	24.0	17.8	21.0
Rock Creek #1	6H14	9800	4/29	55	21.2	29.9	33.7	
Rock Creek #2	6H14	9800	4/29	51	17.3			
Ryan Park	6H6A	8400	4/27	5	1.6	12.0	14.2	3.8*
Webber Springs	6H9A	9000	4/28	19	7.4	21.8	17.3	15.8
Webber Springs #2	6H9A	9000	4/28	22	8.8			
Willow Creek Pass C	6J5	9500	4/28	19	6.5	12.5	8.3	12.0

## GREEN RIVER - ABOVE GREEN RIVER

Big Sandy Opening	9G9P	9220	4/28	27	9.2	18.9	11.9	11.0*
Dutch Joe R.S.	9G5	8700	4/27	7	1.7	11.6	9.1	4.4a
East Rim Divide	10F17MP	7950	5/2	11	4.1	12.2	7.9	10.2*
Elk Heart Park	9F23P	9400	4/29	29	8.6	21.9	15.6	14.0*
Gros Ventre	10F19A	8750	5/1	27	9.3	17.2	10.1	11.2*
Kendall R.S. #2	10F15	7900	5/1	11	4.6	15.2	8.8	6.1*
Loomis Park #2	10F16	8500	5/2	18	7.5	26.6	16.0	11.9*
Mulligan Park	9G1	8900	4/29	18	7.2	11.5	10.8	7.7
New Fork Lake	9F21	8325	4/29	17	6.6	15.8	10.5	
North Horse Creek	10G16	8200	5/2	18	8.4	27.6	20.8	
Piney LaBarge #2	10G10	8820	4/30	24	10.4	30.5	24.7	18.5*
Pocket Creek	9G11	9360	4/28	29	8.3	17.1	13.0	12.8*
Poison Meadows	10G6A	8500	4/30	54	20.3	41.8	31.0	30.9*
Snyder Basin #2	10G13MP	8040	4/30	17	6.4	21.0	15.9	11.0*
Soda Lake	10G14	8300	4/29	26	9.9	24.4	17.0	14.6*
South Pass	8G3MP	9000	5/2	25	9.7	21.4	15.1	14.5
Triple Peaks	10G15	8500	4/29	43	18.0	39.4	27.5	25.8*

## SNAKE RIVER - ABOVE JACKSON LAKE

Grassy Lake	10E15MP	7265	5/1	52	26.4	39.2	32.8	33.1*
Lewis Lake Divide	10E9	7900	4/30	76	35.5	56.3	37.2	37.1*



WYOMING SNOW SURVEYS - ABOUT MAY 1, 1966

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			1966			PAST RECORD		
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)		
						1965	1964	Average 1948-62
<u>GREEN RIVER BELOW GREEN RIVER</u>								
Big Park †	10G11	8700	4/28	4.5	15.5	30.7	21.2	20.0*
Black's Fork Jct. <sup>u</sup>	10J22	8925	4/25	4	1.4	14.9	10.1	
Buck Pasture <sup>u</sup>	10J23A	9700	Delayed			N.R.	N.R.	
East Fork Black's Fk. <sup>u</sup>	10J21	9300	4/25	12	5.2	15.8	12.8	
Elk River <sup>c</sup>	6J4	8700	4/25	22	9.3	20.3	18.9	13.4
Henry's Fork <sup>u</sup>	10J24A	10200	Delayed			N.R.	N.R.	
Hewinta R.S. <sup>u</sup>	10J4	9500	4/25	12	5.2	14.3	13.1	
Hickerson Park <sup>u</sup>	9J8	9100	4/25	0	0.0	5.7	8.8	
Kelly R.S.	10J12P	8200	4/28	33	12.5	28.6	19.4	15.9*
Lake Fork Basin <sup>u</sup>	10J25	11100	Delayed			N.R.	N.R.	
Old Battle #1 †	6H10P	9800	4/28	62	25.0	44.1	32.4	27.4*
Old Battle #2 †	6H10P	9800	4/28	67	28.0			
Spirit Lake <sup>u</sup>	9J7	10300	4/25	23	7.5	17.9	17.9	
<u>JACKSON LAKE TO PALISADES</u>								
Afton R.S.	10G4	6200	4/28	0	0.0	0.0	0.0	0.0
Bryan Flat	10F14	6250	4/29	0	0.0	3.5	4.7	2.0*
Blind Bull Summit †	10G2A	8750	No Report			N.R.	N.R.	
CCC Camp †	10G7	7500	4/28	9	3.1	8.7	12.3	4.6*
East Rim Divide †	10F17MP	7950	5/2	11	4.1	12.2	7.9	10.2*
Grey's Boundary	10F18	5800	4/28	0	0.0	0.0	9.7	0.9*
Gros Ventre †	10F19	8750	5/1	27	9.3	17.2	10.1	11.2*
Grover Park Divide	10G3	7500	4/28	8	3.3	8.5	13.4	8.1*
Loomis Park #2 †	10F16	8500	5/2	18	7.5	26.6	16.0	11.9*
Poison Meadows †	10G6A	8500	4/30	54	20.3	41.8	31.0	30.9*
Salt River Summit †	10G8MP	7900	4/28	20	7.4	17.8	16.3	9.8*
Snow King Mtn. #3	10F20M	7600	No Report			15.2	12.6	9.4*
Teton Pass #2	10F13	8500	4/29	58	25.2	43.6	N.R.	37.8*
Togwotee Pass †	10F9MP	9600	4/30	60	23.9	44.0	33.4	33.7
<u>BEAR RIVER</u>								
Big Park †	10G11A	8700	4/28	4.5	15.5	30.7	21.2	20.0*
CCC Camp †	10G7	7500	4/28	9	3.1	8.7	12.3	4.6*
Goodman Ranch <sup>u</sup>	10J6	7900	4/26	0	0.0	4.7	2.8	0.0*
Hayden Fork <sup>u</sup>	10J7	9300	4/26	16	6.6	22.8	18.0	17.7*
Kelly R.S.	10G12P	8200	4/28	33	12.5	28.6	19.4	15.9*
Monte Cristo <sup>u</sup>	11H12	8960	4/27	4.1	17.7	32.6	27.1	26.2*





WYOMING SNOW SURVEYS - ABOUT MAY 1, 1966

Drainage Basin and Snow Course	Number of or State Elev.	SNOW COVER MEASUREMENTS						
		1966			PAST RECORD			
		Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)			Average
					1965	1964	1948-62	

BEAR RIVER, CON'T.

Poison Meadows ‡	10G6	8500	4/30	54	20.3	41.8	31.0	30.9*
Salt River Summit ‡	10G8MP	7900	4/28	20	7.4	17.8	16.3	9.8*
Steel Creek Park <sup>u</sup>	10J20A	9900	4/25	42	13.7	25.4	17.6	
Still Water Camp <sup>u</sup>	10J17	8550	4/26	0	0.0	13.9	11.2	7.5*
Trial Lake <sup>u</sup>	10J8	9800	4/29	44	19.2	38.8	24.9	30.9*

MISSOURI - BELLE FOURCHE

Bearlodge Divide	4E2P	4580	No Report		0.0	0.0		
Warren Peak	4E1P	6400	No Report		0.0	24.7		

\* Average does not contain 15 years of record

c Colorado snow courses.

m Montana snow courses.

u Utah snow courses.

A Aerial stadia marker.

M Soil moisture stack.

P Pearson Precipitation gage.

a Average partially estimated.

e Water content estimated.



# WYOMING MOUNTAIN PRECIPITATION ABOUT APRIL 1966

Drainage Basin and Precipitation Gage	Elevation	Date of Survey	Precip. (in.)	1965 Precip. (in.)
<u>UPPER YELLOWSTONE RIVER</u>				
Lake Camp	7850	4/30	1.3	2.6
<u>LOWER YELLOWSTONE RIVER</u>				
Burgess Junction	7900	4/30	2.7	2.0
Dennison Mountain *		No Report		1.2
Powder River Pass *	9400	4/29	4.4	2.2
South Pass *	9000	5/2	2.0	3.5
Togwotee Pass *	9600	4/30	5.2	4.6
<u>NORTH PLATTE</u>				
Brooklyn Lake #2 *	10200	5/1	2.9	4.2
Buffalo Pass	10000	No Report		3.0
Casper Mountain *	7940	4/28	4.5	2.8
Chambers Lake	9000	4/30	2.1	4.1
Foxpark-	9200	4/30	0.7	2.2
North French Creek	10200	4/26	2.4	2.5
Old Battle *	9800	4/28	3.4	7.4
Pole Mountain #2 *	8700	4/30	1.2	2.7
South Pass *	9000	5/2	2.0	3.5
Valley View	8000	No Report		1.6
Willow Creek	9500	4/30	2.2	2.0
Rock Creek	9800	4/29	2.7	
<u>GREEN RIVER</u>				
Big Sandy Opening *	9220	4/28	1.4	2.5
East Rim Divide *	7950	5/2	1.3	1.5
Elk Heart Park *	9400	4/29	1.7	3.1
Snyder Basin *	8040	4/30	0.5	1.8
South Pass *	9000	5/2	2.0	3.5
<u>SNAKE RIVER</u>				
East Rim Divide *	7950	5/2	1.3	1.5
Grassy Lake *	7265	5/1	3.2	5.7
Lewis Lake Divide *	7900	4/30	3.3	8.0
Moran	6500	4/30	1.4	3.2
Salt River Summit *	7900	4/28	1.0	1.8
Snake River Station	6780	4/30	2.0	3.4
Togwotee Pass *	9600	4/30	5.2	4.6
<u>BEAR RIVER</u>				
Kelly R.S. *	8200	4/28	1.9	3.4
Salt River Summit *	7900	4/28	1.0	1.8

\* USDA, Soil Conservation Service Pearson Precipitation Gages.





STATUS OF WYOMING RESERVOIR STORAGE - MAY 1, 1966  
IN 1000's ACRE FEET

BASIN and/or STREAM	RESERVOIR	TOTAL		INACTIVE STORAGE	ACTIVE CAPACITY	ACTIVE STORAGE		
		TOTAL CAPACITY	STORAGE 1966			1966	1965	1948-62 Average
Snake River	Grassy Lake	15.4	9.8	0.3	15.1	9.5	12.6	12.4
Snake River	Jackson Lake			Unknown	847.0	673.8	401.0	422.9
Snake River	Palisades	1402.0	1300.2	158.0	1244.0	1142.2	315.0	777.2
North Platte	Seminole	1010.8	407.5	0.4	1010.4	407.1	90.2	431.3
North Platte	Pathfinder	1015.9	465.6	0.0	1015.9	465.6	143.2	627.7
North Platte	Guernsey	44.7	35.6	0.0	44.7	35.6	36.3	26.8
North Platte	Alcova	188.9	178.1	158.1	30.8	20.0	25.6	18.5
North Platte	Glendo	795.2	469.8	11.5	783.7	458.3	427.0	370.8*
Laramie River	Wheatland	98.9	99.2	5.8	93.1	93.4		35.6*
Belle Fourche	Keyhole	340.4	140.8	9.7	330.7	131.1	129.3	5.2*
Wind River	Bull Lake	152.5	85.0	0.7	151.8	84.3	44.5	51.5
Wind River	Pilot Butte	37.0	35.6	5.4	31.6	30.2	30.8	24.2
Wind River	Boysen	952.4	582.3	252.1	700.3	330.2	231.6	156.9*
Big Horn River	Anchor	17.4	0.0	0.2	17.2	-0.2	-0.2	-0.1*
Greybull River	Sunshine	52.4	46.5	0.0	52.4	46.5		
Shoshone River	Buffalo Bill	421.3	286.2	48.2	373.1	238.0	117.3	135.2
Green River	Big Sandy	39.7	39.8	1.4	38.3	38.4		13.5

\* Less than 15 years of record in the 1948-62 period.



STATUS OF RESERVOIR STORAGE - MAY 1, 1966  
IN 1000's ACRE FEET

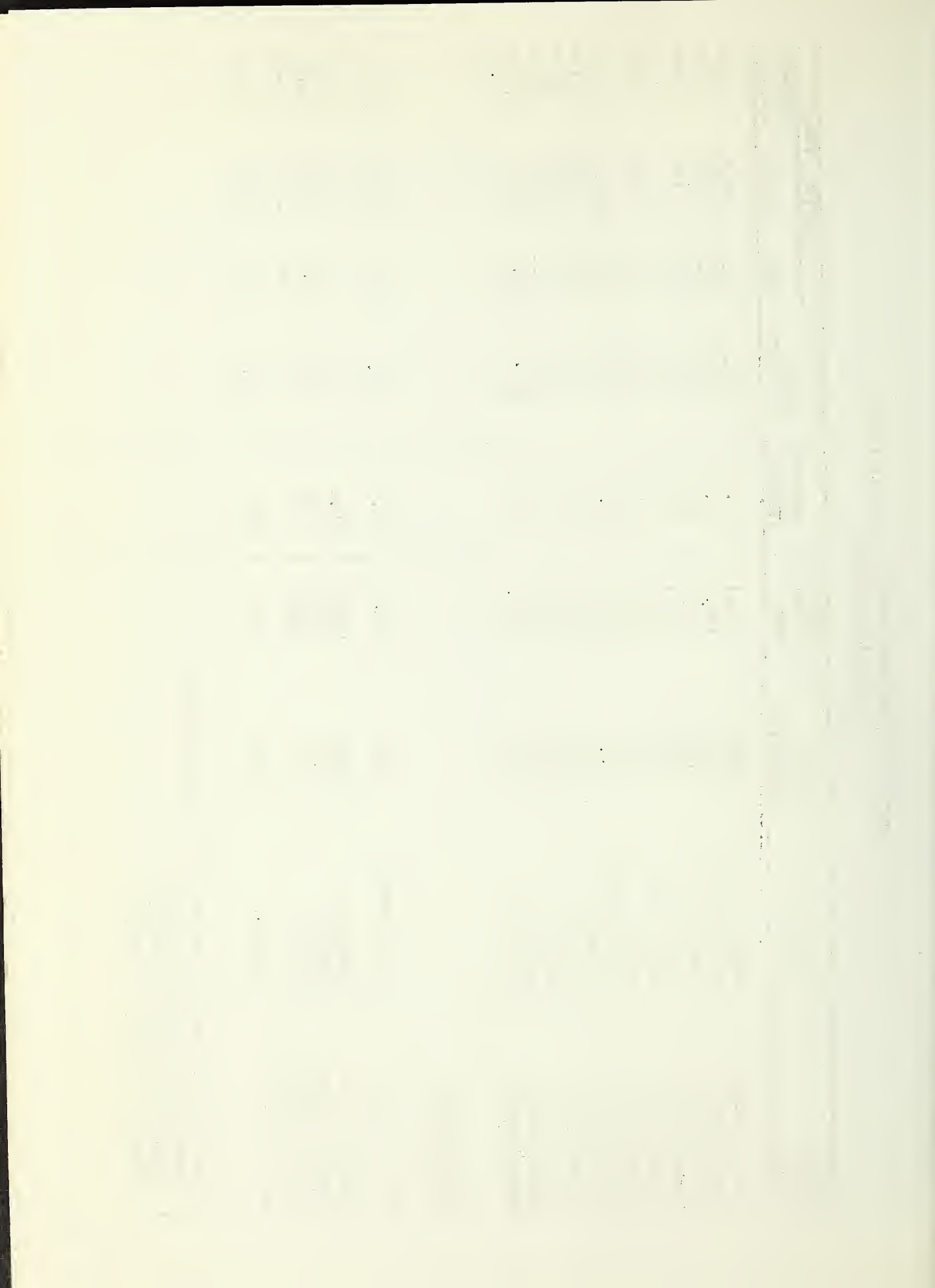
BASIN and/or STREAM	RESERVOIR	TOTAL CAPACITY	TOTAL STORAGE 1966	INACTIVE STORAGE	ACTIVE CAPACITY	ACTIVE STORAGE		
						1966	1965	1948-62 Average
Kansas Basin	Bonny <sup>c</sup>	170.2	40.1	2.9	167.3	37.2	29.3	37.9*
Kansas Basin	Swanson Lake <sup>n</sup>	254.0	120.2	14.0	240.0	106.2	106.8	89.9*
Kansas Basin	Enders <sup>n</sup>	74.5	46.5	10.4	64.1	36.2	31.7	35.6*
Kansas Basin	Hugh Butler <sup>n</sup>	86.6	37.1	7.6	79.0	29.4		
Kansas Basin	Harry Strunk <sup>n</sup>	89.3	37.9	9.5	79.8	28.4		
Kansas Basin	Norton <sup>k</sup>	134.7	30.3	2.9	131.8	27.4	32.0	32.4*
Kansas Basin	Harlan County <sup>n</sup>	840.6	348.0	144.8	695.8	203.2	254.9	173.8*
Kansas Basin	Lovewell <sup>k</sup>	92.2	41.4	16.8	75.4	24.2	42.9	31.2*
Kansas Basin	Kirwin <sup>k</sup>	314.6	95.3	9.8	304.8	85.5	54.8	56.8*
Kansas Basin	Webster <sup>k</sup>	260.7	68.5	3.3	257.4	65.2	38.2	50.9*
Kansas Basin	Cedar Bluff <sup>k</sup>	377.0	183.7	35.3	341.7	148.4	150.6	141.6*
Kansas Basin	Kanopolis <sup>k</sup>	432.9	49.1	0.0	432.9	49.1	51.7	55.5*
SOUTH DAKOTA								
Belle Fourche	Belle Fourche	185.2	134.1	6.8	178.4	157.3	182.7	103.9
Cheyenne River	Angostura	160.2	160.0	70.0	90.2	90.0	68.2	45.0*
Cheyenne River	Deerfield	15.7	15.7	0.6	15.1	15.1	15.0	11.2
Cheyenne River	Pactola	99.0	55.8	1.0	98.0	54.8	54.5	16.6*
Grand River	Shadehill	357.4	134.2	58.2	299.2	76.0	83.8	77.7*

\* Less than 15 years of record in the 1948-62 period.

c Reservoirs Located in Colorado

k Reservoirs Located in Kansas

n Reservoirs Located in Nebraska



# Agencies Cooperating in Wyoming Snow Surveys

## FEDERAL

U.S. Department of Agriculture  
Forest Service  
Soil Conservation Service

U.S. Department of Commerce  
Weather Bureau

U.S. Department of Interior  
Bureau of Reclamation  
Geological Survey  
National Park Service  
Indian Service

## STATE

State Engineer of Wyoming

University of Wyoming  
Natural Resources Research Institute  
Department of Agricultural Engineering

## PRIVATE

Irrigation Districts  
Greybull Valley Irrig. Dist.  
Wheatland Irrig. Dist.

Soil and Water Conservation Districts  
Bridger Valley SWCD  
Clouds Peak SWCD  
Cody SWCD  
Dubois-Crowheart SWCD  
Greybull Valley SWCD  
Lake DeSmet SWCD  
Laramie Rivers SWCD  
Little Snake River SWCD  
Medicine Bow SWCD  
Pavillion and Wind River SWCD  
Pinedale SWCD  
Powder River SWCD  
Powell-Clarks Fork SWCD  
S and E SWCD  
Shell Valley SWCD  
Shoshone SWCD  
Tongue River SWCD  
Washakie SWCD  
Wheatland SWCD



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

P. O. Box 340  
CASPER, WYOMING 82602

OFFICIAL BUSINESS

POSTAGE AND FEES PAID  
U. S. DEPARTMENT OF AGRICULTURE

**FIRST CLASS MAIL**

**FEDERAL - STATE - PRIVATE  
COOPERATIVE SNOW SURVEYS**

Furnishes the basic data  
necessary for forecasting  
water supply for irrigation,  
domestic and municipal water  
supply, hydro-electric power  
generation, navigation,  
mining and industry

*"The Conservation of Water begins  
with the Snow Survey"*